Remarks

      The applicants have carefully reviewed the Final Office action dated August 4, 2008, and the references cited therein. By way of the forgoing amendments, claim 36 has been amended to include all of the limitations of its parent claim 1 and claims 1-35 have been cancelled without prejudice to their further prosecution. The applicants expressly reserve the right to pursue the subject-matter of claims 1-35 during prosecution of the instant application, or a later continuation. In view of the forgoing amendments and the following remarks, it is respectfully submitted that all pending claims are in condition for allowance and reconsideration is requested.

      As an initial matter, applicants note that claim 36 has been converted to independent form to reduce the number of issues for consideration. Because amended claim 36 includes all of the recitations of claim 1 and there were no intervening claims, the scope of claim 36 has not been changed. Thus, any rejection of claim 36 that relies on new prior art cannot be made final because such prior art should have been found during searching and consideration of claim 36.

      In the Final Office action, Claim 36 was rejected as unpatentable over Kikuchi (US 6,577,811) in view of Pezzillo (US 6,434,621) and Kikuchi in view of Fukushima (US 6,584,272). None of Kikuchi, Pezzillo, or Fukushima describes or suggests comparing a remaining disk storage space to a user specified disk space alert setting. Nor do the references suggest using such a comparison to determine when a disk space alert should be displayed. Thus, as explained in further detail below, it is respectfully submitted that none of the cited references, or any combination thereof, teaches or suggests comparing a remaining disk storage space to a disk space alert user setting and displaying an out of disk space alert based on the comparison as recited in claim 36. Accordingly, because none of the references describes or suggests these elements of claim 36, no combination of the references can describe or suggest such elements. Therefore, claim 36 is patentable over the cited references.

THE REJECTION BASED ON KIKUCHI IN VIEW OF PEZZILLO

      While, the combination of Kikuchi and Pezzillo arguably suggests, at most, a user setting for enabling or disabling a disk space alert, the combination does not suggest comparing remaining disk storage space to a disk space alert user setting.

Kikuchi includes two processes that relate to claim 36. First, Kikuchi describes displaying a message indicating "No Free Space is Available" after determining that no free disk space is available. (Kikuchi, ST130 and ST132 in FIG. 47). However, Kikuchi does not describe that the display of the message is based on a comparison of remaining disk storage space to a specified value (either predetermined or user specified). Even if Kikuchi's determination that free space does not exist includes a comparison, there is no suggestion that the comparison is between the remaining disk storage and a user setting. Accordingly, this approach does not meet the recitations of claim 36 including displaying a message based on a comparison of the remaining disk storage space to a user specified setting. In a second process, Kikuchi describes comparing a remaining amount of recording space to a value, but Kikuchi does not describe displaying a message based on the determination. Rather, Kikuchi describes "sett[ing] dummy pack insertion mode" (ST 422G and ST424G in Fig. 44) or "set[ing] MPEG2 recording mode" (ST422F and ST 424F in FIG. 43), which steps do not include presenting an alert. Further, Kikuchi does not suggest that the value is a disk space alert user setting. Rather, Kikuchi indicates that the value is a predetermined value. (Kikuchi, Col. 55, lines 48-52). In summary, Kikuchi does not describe displaying a disk space alert in response to a comparison of a remaining disk storage space to a value. Even if the space determination of Kikuchi includes a comparison, a point that the applicants do not concede, Kikuchi does not describe comparing a remaining disk storage space to a disk space alert user setting.

Pezzillo cannot cure the deficiencies of Kikuchi. Pezzillo describes that a user at an operator workstation can "set alert conditions, such as low disk space." (Pezzillo, Col. 13, lines 37-38). Pezzillo also states, "an alert can cause an e-mail to be sent when a low disk space condition is reached." (Pezzillo, Col. 6, lines 49-51). Pezzillo does not describe comparing a remaining disk storage space to a disk space alert user setting. Rather, Pezzillo merely describes that a user can enable an alert for low disk space by setting an alert condition. Pezzillo does not describe or suggest that setting an alert condition includes specifying a threshold such as a disk alert user setting. In other words, Pezzillo does not suggest allowing a user to select disk space alert user setting (i.e., a setting to which a remaining amount of recording is compared).

Accordingly, while applicants do not concede as much, at best, a combination of Kikuchi and Pezzillo suggests allowing a user to enable or disable a disk space alert (as suggested in

Pezzillo) such as an alert when no free space exists (as suggested in Kikuchi) or a message indicating a remaining amount of recording space (as suggested by Kikuchi). The combination does not suggest displaying an alert based on a comparison of a remaining disk storage space to a disk space alert user. Accordingly, it is respectfully submitted that Kikuchi and Pezzillo, whether taken alone or in combination, do not describe or suggest at least one recitation of claim 36. It is well established that the prior art must teach or suggest each of the claim elements to establish a *prima facie* case of obviousness. See *In re Oetiker*, 24 USPQ. 2d 1443, 1446 (Fed. Cir. 1992); *Ex parte Clapp*, 227 USPQ. 972, 973 (Bd. Pat. App. 1985); *In re Royka*, 490 F.2d 981 (CCPA 1974) and M.P.E.P. § 2143. Accordingly, claim 36 is patentable over Kikuchi in view of Pezzillo.

THE REJECTION BASED ON KIKUCHI IN VIEW OF FUKUSHIMA

While the combination of Kikuchi and Fukushima arguably suggests, at most, displaying a message indicating a remaining amount of recording time or space and allowing a user to specify recording conditions that affect how quickly the recording time or space is consumed, the combination does not suggest comparing remaining disk storage space to a disk space alert user setting.

As described in the previous section, Kikuchi does not describe displaying a disk space alert in response to a comparison of a remaining recording time to a user specified value such as a disk space alert user setting.

Fukushima cannot cure the deficiencies of Kikuchi. Fukushima describes a system whereby a recording time multiplied by a recording rate is compared to free disc space, and a warning message is displayed when the recording time multiplied by the recording rate is greater than the free disc space. (Fukushima, FIG. 12). While Fukushima suggests that the recording rate can be selected by a user (Col. 7, lines 23-25), the recording rate is clearly not a disk space alert user setting as suggested by the examiner (Office action, Page 15, lines 1-9). Rather, it is clear from the specification of Fukushima that Fukushima is concerned with allowing a user to specify a desired recording rate.

> However, if a recording level in a variable-rate range is decreased
> forcedly by the disc recorder, it gives rise to a problem to some
> users who do not like recording conditions that will result in

> degradation of image quality. Therefore, in the present preferred
> embodiment, there is provided such an arrangement that the user
> can select recording conditions indicated in setup operation instead
> of leaving the entire control to the disc recorder.

(Fukushima, Col. 7, lines 16-25). In other words, Fukushima intends to allow users to control the recording rate and displays a message to warn users when a selected recording rate will exceed the available disc space minus a reserved disk space. Fukushima does not suggest that a user can set a disk space alert user setting specifying a level of disk space below which a user will be alerted.
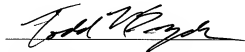
Accordingly, while applicants do not concede as much, at best a combination of Kikuchi and Fukushima suggests displaying a disk alert or indication of remaining recording time when a user selected recording rate multiplied by a recording time would exceed an available disk space. The combination does not suggest displaying an alert based on a comparison of a remaining disk storage space to a disk space alert user setting. Accordingly, it is respectfully submitted that Kikuchi and Fukushima, whether taken alone or in combination, do not describe or suggest at least one recitation of claim 36. It is well established that the prior art must teach or suggest each of the claim elements to establish a *prima facie* case of obviousness. See *In re Oetiker*, 24 USPQ. 2d 1443, 1446 (Fed. Cir. 1992); *Ex parte Clapp*, 227 USPQ. 972, 973 (Bd. Pat. App. 1985); *In re Royka*, 490 F.2d 981 (CCPA 1974) and M.P.E.P. § 2143. Accordingly, claim 36 is patentable over Kikuchi in view of Fukushima.

Thus, because none of the cited references describes comparing a remaining disk storage space to user specified setting or threshold, no combination of the references can describe comparing a remaining disk storage space to a disk space alert user setting and displaying an out of disk space alert based on the comparison. Reconsideration of claim 36 and allowance thereof is respectfully requested. If there is any matter that the examiner would like to discuss, the examiner is invited to contact the undersigned representative at the telephone number set forth below.

Respectfully submitted,

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